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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,402	12/31/2003	Paul T. Van Gompel	19,577	8997
23556	7590	09/06/2005		
KIMBERLY-CLARK WORLDWIDE, INC. 401 NORTH LAKE STREET NEENAH, WI 54956				
			EXAMINER CHAPMAN, GINGER T	
			ART UNIT 3761	PAPER NUMBER

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/750,402

Applicant(s)

VAN GOMPEL ET AL.

Examiner

Ginger T. Chapman

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 34-45 and 47-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-45 and 47-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/16/04; 31/01/05; 5/27/05; 7/27/05; 8/14/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 May 2005 has been entered.

### ***Election/Restrictions***

This application contains claims directed to the following patentably distinct species of the claimed invention (Interview Summary PTOL-413: 8/12/2005):

1. Species 1 is drawn to a diaper having a liquid impermeable outer layer and liquid permeable inner layer.
2. Species 2 is drawn to a diaper having a liquid permeable outer layer and liquid impermeable inner layer.
3. Species 3 is drawn to a diaper having a liquid permeable outer layer and liquid permeable inner layer.
4. Species 4 is drawn to a diaper having a liquid impermeable outer layer and liquid impermeable inner layer.

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However, in light of Applicant remarks during telephone interview 8/12/2005, it would no longer be a burden on examiner to search all species and therefore the restriction requirement is withdrawn.

### *Status of the Claims*

As per communications filed 20 May 2005, claims 34-45 and 47-51 are pending; claims 1-33 and 46 are cancelled.

### *Claim Language Interpretation*

As per Applicants' arguments filed 20 May 2005 at page 16, lines 1-2, ll. 9-12 and ll. 21-22, and per claim 44 which depends from claim 34 Examiner is considering the inner layer of claim 34 to be liquid impermeable.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 34, 35, 38, 39, 40-45, 47 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roe et al (US 6,482,191) in view of Kling ('086) and further in view of Huffman (US 4,935,021).

Claims 34, 41-43 and 45: As depicted in Figure 2, Roe et al disclose a disposable absorbent garment (20), the disposable absorbent garment comprising: an outer layer (26); an elastic inner layer (24), wherein the elastic inner layer has an elastic inner layer perimeter and

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wherein the elastic inner layer defines an opening (60) located in an internal position to the elastic inner layer perimeter. Roe discloses the elastic inner layer is elastic in both a longitudinal and lateral direction of the absorbent garment (col. 2, ll. 46-47) and can include two or more layers of materials (col. 8, ll. 37-40).

Claims 34, 40, 47 and 51: Bonding the elastic inner layer perimeter and the absorbent assembly to the outer layer is well known in the diaper art. Roe et al, at column 4, line 3, incorporating by reference the teachings of Allen et al cited in Office actions mail dates 3 November 2004 and 22 February 2005, discloses the elastic inner layer perimeter is bonded to the pleated outer layer and the absorbent assembly is attached to the outer layer along a lateral centerline of the absorbent assembly with a plurality of adhesive bonds and thus Roe discloses the inner layer bonded to the pleated outer layer and the absorbent assembly attached to the outer layer (see Office action 3 November 2004).

With regard to claim 34: Roe does not expressly disclose the absorbent assembly top sheet layer. As seen in Figure 2, Kling teaches diaper having an elastic inner layer (2) defining an opening (17), an outer layer (5) and an absorbent assembly (4) having a topsheet layer (3). Kling states that the benefit of making an absorbent assembly with this design is that when the diaper elastic inner layer (2) defines an opening the absorbent assembly topsheet layer (3) prevents skin irritation by preventing the skin of the user from coming into contact with the absorbent assembly (4) by enclosing the absorbent assembly between the topsheet (3) and the bottom layer (column 2, lines 54-57) thus expressing the desire for an absorbent assembly having a topsheet layer that prevents skin irritation and thereby providing the motivation for a worker of routine skill in the art to form an absorbent assembly having a topsheet layer. Therefore, it

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would have been obvious to one having ordinary skill in the art at the time the invention was made to form the absorbent assembly of Roe having a topsheet layer as taught by Kling thereby providing a diaper that prevents skin irritation.

With regard to claims 34, 38 and 39: The combination of Roe and Kling discloses the outer layer which is liquid impermeable as recited in the instant **claim 38** but does not expressly disclose the absorbent assembly barrier layer. Huffman, at column 2, lines 48-54 expresses the desire for an absorbent assembly (14) having a fluid impervious barrier layer (28) as recited in the instant **claim 34** underlying the absorbent assembly (14) such that the outer layer (16) of the diaper is liquid permeable as recited in the instant **claim 39** (col. 6, ll. 43-44) thereby enhancing the breathability of the diaper (col. 2, lines 37-45) thus improving comfort for the wearer (col. 6, ll. 48-49) while attaining the desired liquid retention and thus reducing diaper rash and reducing leakage thus providing the motivation to do so in the combination of Roe and Kling. Therefore, to form the absorbent assembly of Roe and Kling having a barrier layer underneath the absorbent assembly as taught by Huffman in order to provide a diaper having enhanced breathability thereby reducing diaper rash and reducing leakage from the absorbent assembly would have been obvious to one having ordinary skill in the art at the time the invention was made.

Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Roe and Kling and Huffman as applied to claim 34 above and further in view of Repke et al (US 4,205,679).

Claims 36 and 37: Roe as modified by Kling and Huffman is silent on the outer layer. Repke teaches a diaper having stretchable inner and outer layers. In particular, Repke teaches an

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outer layer that is elastic (col. 5, ll. 27) and has one or more pleats (col. 4, ll. 44) and is extensible (col. 4, ll. 45). Repke states that the advantage of making an outer layer with this design is to give enhanced stretch and extensibility characteristics (col. 2, ll. 33) thus providing good conformability and fit to the body of the wearer without bulkiness (col. 2, ll. 19-20) particularly in the leg and waist area thereby preventing the problem of liquid strike-through and leakage thereby providing the motivation and desirability of such. In view of the teachings of Repke, to form the outer layer of Roe, Kling and Huffman having elastic and extensibility characteristics in order to provide a diaper with enhanced fit and reduced leakage would have been obvious to one of ordinary skill in the art at the time the invention was made since Repke states at column 2, ll. 24 to 33 that such a modification enhances the fit of the diaper and prevents liquid strike-through.

Claim 44: Roe does not expressly disclose the inner layer is liquid impermeable. Kling teaches the ability of an elastic inner layer to conform closely to the body of the wearer (col. 1, ll. 10-11) while allowing urine to pass through the opening in the impermeable material (col. 8, ll. 44-47) thus expressing the desire for an elastic inner layer that allows urine to pass through to the underlying absorbent assembly. In particular, Kling teaches that when the inner layer defines an opening the inner layer can be liquid impermeable (col. 8, ll. 44-47) and the opening allows urine to pass through the elastic inner layer to the topsheet layer of the absorbent assembly and thereafter be absorbed by the underlying absorbent assembly. It would therefore be obvious to one of ordinary skill in the art to form the inner layer of Roe of impermeable material as taught

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by Kling in order to provide a flexible inner layer that conforms to the body of the wearer while allowing urine to pass through to the underlying absorbent assembly.

Claims 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Roe, Kling and Huffman as applied to claim 34 above and further in view of Freeland (US 5,269,775).

Claims 48 and 49: Roe as modified by Kling and Huffman discloses the garment but does not expressly disclose the outer layer length and width greater than the inner layer length and width. Freeland, at column 1, ll. 50-51 teaches the ability of the elasticized inner layer to provide a close fit that is more comfortable to the wearer and thus expresses the desire for an elasticized inner layer that conforms to the anatomy of the wearer. Freeland teaches the diaper having an outer layer length and width greater than the inner layer length and width (col. 4, ll. 60 68 to col. 5, ll. 1-5). In view of the teachings of Freeland, it would therefore have been obvious to one having ordinary skill in the art at the time the invention was made to form the diaper of Roe having an outer layer length and width greater than the inner layer length and width, since Freeland states at column 2, ll. 9-15 that such a modification provides a diaper that conforms to the wearer's anatomy thus providing a comfortable diaper for the wearer.

Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Roe, Kling and Huffman as applied to claim 34 above and further in view of McCormack (US 5,997,981).



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Claim 50: Roe as modified by Kling and Huffman is silent as to the range of percent bonded area to unbonded area. McCormack, at column 1, ll. 56-60, expresses the desire for an inexpensive outer layer useful as the loop component for nonpermanent fastening of the garment about the body of the wearer such that the garment can be separated when subjected to a desired level of peel force without separating the laminated layers. McCormack further teaches, at column 3, ll. 62-67 and col. 4, ll. 13-17, that it is known in the diaper art that typically the useful percent bonded area varies from around 10% to around 30% of the area of the laminate and that it is well known in the diaper art that such bonding holds the laminate layers together and imparts integrity to each individual layer. In view of these known teachings to bond the inner and outer layers of Roe with a percentage of bonded area to unbonded area of from 10 to 40 as taught by McCormack would have been obvious to one having ordinary skill in the art at the time the invention was made in order to meet the requirements of peel strength and refastenability, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges of result effective variables in known processes is within the skill of a routine worker in the art.

### ***Response to Arguments***

Applicant's arguments with respect to claims 34-45 and 47-51 have been considered but are moot in view of the new grounds of rejection.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2005/0143710 to Van Gompel et al discloses an absorbent garment having stretchable inner and outer layers.

US 2005/0148987 to Van Gompel et al discloses an absorbent garment having an elastic inner layer defining an opening.

Although these references are pertinent prior art, neither was used to reject any claims in the first office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ginger T. Chapman whose telephone number is (571) 272-4934. The examiner can normally be reached on Monday through Friday 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Ginger Chapman

Examiner, Art Unit 3761

8/22/05

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TATYANA ZALUKAEVA  
PRIMARY EXAMINER

